

Memo

To: Rick Woodard, CALFED Water Quality Program Leader; Peter Mangarella, Woodward-Clyde

From: Mary Dunne, CDFG

Date: August 6, 1997

Following are CDFG Comments to the Draft Water Quality Impacts Technical Report.

General Comments: The organization of the Draft Water Quality Impact Technical Report received several positive comments in comparison to other impacts technical reports. Again there are individuals who were unable to review this round but interest is still high for review of future drafts. Several comments are only minor edits, and most were associated with the ERPP, but all were included

Section 1; Summary

Page 1-3, paragraph five. Change 40% to 60%.

Section 2; Analytical Methods

Page 2-1, paragraph one: Insert the word 'be' in the second sentence.

Page 2-1, paragraph three: Replace 'actin' with action.

Page 2-2, *significance thresholds*: The second and third bulleted sentences assume that any 20% change relative to existing condition will result in an automatic impact described as permanent adverse change. This is a very broad 'across the board' type statement considering all the parameters of concern and several unknown associated toxicity thresholds from an environmental standpoint.

Section 3; Environmental Impacts of Common Programs

Page 3-1, *Ecosystem Restoration Program Plan*: The designated Ecosystem Restoration Program Plan (ERPP) programmatic actions outlined in Tables 3-1 through 3-3, and Table 3-5 are only partial lists of the programmatic actions outlined in the current version of the ERPP (May 20, 1997; Volume II: Ecological Zone Visions). In addition to being presented in Volume II of the ERPP, the ERPP programmatic actions are more tangibly summarized in table form in Appendix A of Phase II Alternatives Descriptions Report (May 8, 1997; Note that the Appendices are a separate document titled Alternate Appendices, May 13, 1997). Additional updated ERPP Programmatic Actions not identified in the Water Quality Technical Report eventually need to be addressed. The following are those ERPP programmatic actions listed by the Four Regions which could have significant water quality impacts:

Delta Region

• *Delta Channel Hydraulics*: Two of four actions are designed to reestablish more natural internal Delta hydraulics, and outline specific operations of the Delta Cross Channel gates and the barrier at the head of Old River (designed to maintain net downstream flows in the mainstem San Joaquin River from Vernalis to immediately west of Stockton during the period from September

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through November to help sustain DO levels and water temperatures sufficient for upstream migrating fall-run chinook salmon).

- **Dredging:** One of four actions is designed to limit non-essential dredging activities in channel-zones by using alternative sources of levee maintenance material.
- **Contaminants:** Two actions are designed to reduce inputs of fumigants, pesticides, and herbicides to the Delta by modifying land management practices on 50,000 acres of urban and agricultural lands, and reduce levels of hydrocarbons entering the Delta from oil refinery releases to the estuary.
- **Exotics:** One of six actions is designed to restore dead-end and open-end sloughs by managing invasive exotic aquatic plants. Large-scale annual weed eradication programs will be implemented so that less than 1% of the surface area of these sloughs and channels are covered by exotic aquatic plants within ten years. Note: As an alternative to mowing, herbicide use (namely fluridone or diquat) may be a more effective treatment, however agricultural users are concerned about potential crop damage resulting from the diversion of treated water.

Bay Region

- **Exotics** (same as for Delta Region- one action).

Sacramento Valley Region

- **Water Quality:** One action is designed to maintain mean daily water temperatures in the Sacramento River between Keswick Dam and the Red Bluff Diversion Dam to protect all life stages of chinook salmon and steelhead trout. Four additional actions are designed to reduce losses of fish and wildlife due to pesticides, hydrocarbons, heavy metals, and other pollutant sources in the Sacramento River. One action is designed to reduce adverse effects of herbicides, pesticides, and fumigants to fish and wildlife in the Colusa Basin by encouraging local agricultural interests to reuse water from the Colusa Basin Drain.
- **Water Temperatures:** Two actions are designed to establish and maintain suitable water temperatures in the outflow of the Colusa Basin Drain. Six actions are designed to improve water quality (temperature) in the Feather, Yuba, and Bear Rivers. Six additional actions are designed to improve water quality (temperature) in the Mokelumne, Calaveras, and Cosumnes Rivers.
- **Contaminants:** Two actions are designed to reduce poor water quality problems in the tailwaters of Camanche Dam on the Mokelumne River.

San Joaquin River Region

- **Water Temperatures:** Two actions are designed to maintain maximum surface water temperatures on the lower Merced, Tuolumne, and Stanislaus Rivers.

Assuming that all ERPP Programmatic Actions will eventually be addressed, we are restricting our comments to the Actions currently analyzed in the Technical Report.

General comment: Since the ERPP is organized by 14 ecological zones, it may be helpful to some readers to briefly state which of the 14 ecological zones are included in each of the 4 geographic regions described in the Water Quality Technical Report. They appear to be broken out as follows:

Sacramento Valley Region (Represented in the ERPP by the Sacramento River, North Sacramento Valley, Cottonwood Creek, Colusa Basin, Butte Basin, Feather River/Sutter Basin, American River Basin, Yolo Basin, and Eastside Delta Tributaries ecological zones).

San Joaquin Valley Region (Represented in the ERPP by the San Joaquin River, East San Joaquin Basin, and West San Joaquin Basin ecological zones).

Sacramento-San Joaquin Delta Region (Represented in the ERPP by the Sacramento-San Joaquin Delta ecological zone).

Bay Region (Represented in the ERPP by the Suisun Marsh and North San Francisco Bay ecological zone).

Page 3-2, Table 3-1: The last two programmatic actions listed in the Table should be redefined as having potentially significant impacts on water quality since temperature is a water quality parameter of concern.

Page 3-2, Action 1, paragraph one: In regards to riparian habitat restoration, the designated total target restoration acreage (defined in text and Table 3-1 as 25,000 to 75,000 acres) is inconsistent with the ERPP. The ERPP designates numerical targets for some streams in the region by acreages or miles, and only descriptive text for others. The Sacramento River restoration target is 16,000 to 24,000 acres, 130 miles along Cottonwood Creek, 50 miles along Sacramento River tributaries, 10 miles each along Mill and Deer Creeks, and 15 miles along the Mokelumne River.

Page 3-4, Action 2, paragraph one: The programmatic actions targeting gravel recruitment to improve spawning habitat subtly qualify the 'annual recruitment' on an 'as-needed basis, based upon adaptive management and monitoring' in order to maintain average annual bedloads. Gravel recruitments at the designated tonnage described in the actions will not necessarily take place on an annual basis; some gravel replacement projects in low gradient stream systems can be expected to last 10 years or more. A recommended change to the last sentence of this paragraph would be "Between 96,000 and 161,000 tons of gravel will be recruited to stream channels each year where necessary to supplement natural gravel recruitment, maintain existing levels of gravel recruitment, and maintain average annual bedloads."

Page 3-8, Table 3-2: The 12,000 to 25,000 ton estimate for gravel recruitment is not designated in the ERPP (however it appears to be a reasonable number).

Page 3-8, Action 1, paragraph one: In regards to riparian habitat restoration, the designated total target restoration acreage (defined in text and Table 3-2 as 1,500 to 5,000 acres) is inconsistent

with the ERPP. The ERPP designates restoration targets as 50 miles for the San Joaquin River, 15 miles along each the Stanislaus, Tuolumne, and Merced Rivers, and 5 miles on streams within the West San Joaquin Basin for a total of 100 miles.

Page 3-9, Action 2, paragraph 1: Replace this paragraph.

Page 3-10, Action 6, paragraph one: Change 3,000 acres to 1,000 acres.

Page 3-14, Action 8, paragraph one: Change 1,000 acres to 3,000 acres.

Page 3-24, Action 3: Reviewers were unable to locate any affected acreage (defined in Table 3-3 as 900-2,300 acres, and in the text as 90-2,300 acres) reference for Delta Channel Hydraulics or Distributary Slough programmatic actions in the ERPP. The 150-250 mile reference is correct.

Page 3-29, Action 9, paragraph two:

Creating setback levees is an acceptable method for riparian restoration, however the setback distances required to maintain a viable riparian system are much greater than those for other habitat types.

Page 3-33, Action 5 paragraph one:

The miles of riparian restoration should actually be 50 to 75. The ERPP denotes "10-15 miles of restoration to take place within *each* of five ecological units that comprise the Suisun Marsh/ SF Bay Ecological Zone." The five ecological units are: Suisun Bay and Marsh, Napa River, Sonoma Creek, Petaluma River, and San Pablo Bay. Consistent with the ERPP, San Pablo Bay needs to be added to the list of restoration areas as the fifth ecological unit in this paragraph

Page 3-53, Action 3, paragraph one: Check accuracy of 10,000 acres; other sources estate 30,000 to 60,000 which may affect analysis.